

REMARKS

Claims 1-13 are pending. The specification, Abstract, and claims 1 and 11-13 have been amended to place the application in better form for examination. Favorable consideration is respectfully solicited.

It will be understood that the scope of the claims has not been narrowed or even changed by this Preliminary Amendment. Moreover, as already noted the claims have not been amended for reasons related to the statutory requirements for a patent but simply to improve their form and thus facilitate prosecution of this application. Accordingly, those seeking to interpret these claims should not limit them only to their literal scopes.

Respectfully submitted,

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Judith Harris
January 16, 2002
Date

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IN THE SPECIFICATION

Page 1, heading at line 3,

[Field of the Invention] Background

Page 1, heading at line 11,

[Background of the Invention]

Page 3, heading at line 10,

[Statement of the Invention] Summary

Page 6, heading at line 18,

[Detailed Description of a Preferred Embodiment] Detailed Description

IN THE CLAIMS

Page 10, paragraph beginning at line 1,

[Claims] What Is Claimed Is:

1. (Amended) A method of handling the transmission of [RLC PDUs] Radio Link Control (RLC) Protocol Data Units (PDUs) from a Radio Access Network (RAN) of a mobile telecommunications system to User Equipment (UE), the method comprising:

at a Gateway (GW) of the UTRAN, segmenting RLC [SDUs] Service Data Units (SDUs) into RLC PDUs for transmission to at least one [or more] Base [Stations (BSs)] Station (BS) of a set of BSs belonging to a handover link set, and combining RLC PDUs received from the at least one [or more of those] BSs into RLC SDUs for transmission to a core network of the system; and

at [the or] each [said] of the at least one BS, buffering RLC PDUs received from at least one of the GW and [or] the UE, and implementing an ARQ mechanism at [the or] each of the at least one BS to facilitate reliable transmission of RLC PDUs between the UE and the GW, the ARQ mechanism [utilising] utilizing ARQ status

messages sent over the air interface, between the UE and the BS(s), in order to acknowledge successfully transmitted data packets and request retransmission of unsuccessfully transmitted data packets.

11. (Amended) A mobile telecommunications system comprising a UMTS Terrestrial Radio Access Network (UTRAN) and, located in the UTRAN:

a Gateway (GW) arranged to segment RLC SDUs into RLC PDUs for transmission to at least one [or more Base Stations (BSs)] Base Station (BS) of a set of BSs belonging to a handover link set, and to combine RLC PDUs received from at least one of the [or more of those] BSs into RLC SDUs for transmission to a core network of the system; and

a plurality of Base Stations [(BS)] (BSs) arranged to form a soft handover link set for a given User Equipment (UE), each said BS being arranged to buffer RLC PDUs received from at least one of the GW and [or] the UE and to implement an ARQ mechanism at [the or] each of the at least one BS to facilitate reliable transmission of RLC PDUs between the UE and the GW, the ARQ mechanism [utilising] utilizing ARQ status messages sent over the air interface, between the UE and the BS(s), in order to acknowledge successfully transmitted data packets and request retransmission of unsuccessfully transmitted data packets.

12. (Amended) A Gateway for use in [the system of claim 11.] a UTMS Terrestrial Radio Access Network (UTRAN) in a mobile telecommunications system, comprising:

means for segmenting RLC SDUs into RLC PDUs for transmission to at least one Base Station (BS) of a set of BSs belonging to a handover link set, and
means for combining RLC PDUs received from at least one of the BSs into RLC SDUs for transmission to a core network of the system.

13. (Amended) A Base Station for use in [the system of claim 11.] a UTMS Terrestrial Radio Access Network (UTRAN) in a mobile telecommunications system, comprising:

means for buffering RLC PDUs received from at least one of a GW and a UE;
and

means for implementing an ARQ mechanism to facilitate reliable transmission
of RLC PDUs between the UE and the GW, the ARQ mechanism utilizing ARQ
status messages sent over the air interface, between the UE and at least one other
BS, in order to acknowledge successfully transmitted data packets and request
retransmission of unsuccessfully transmitted data packets.

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IN THE ABSTRACT

Page 13, paragraph beginning at line 2.

A method of handling the transmission of [RLC PDUs] Radio Link Control (RLC) Protocol Data Units (PDUs) from a Radio Access Network (RAN) of a mobile telecommunications system to User Equipment (UE) is provided. At a Gateway (GW) of the UTRAN, RLC [SDUs] Service Data Units (SDUs) are segmented into RLC PDUs for transmission to one or more Base Stations (BSs) of a set of BSs belonging to a handover link set, and RLC PDUs received from one or more of those BSs into RLC SDUs are combined for transmission to a core network of the system. At [the or] each of the at least some [said] BS, RLC PDUs received from the GW [and or] and/or the UE are buffered. An ARQ mechanism is implemented at [the or] each of the at least some BS to facilitate reliable transmission of RLC PDUs between the UE and the GW.

[Figure 2]